

Algebraic Graphing

Task: For this project you will pick **at least** 1 algebraic equation and create a graph on grid paper, glue to a sheet of 9"x12" construction paper and post all other required data on construction paper. Make sure all work is neat and legible, using as much of the paper as possible. Add color and other touches to make it a creative finished product

Requirements: Pick one of the following algebraic equations for your poster:

$$y = 2x - 1; y = 2x; y = \frac{x}{2}; y = \frac{x}{2} + 1; y = 3x - 5$$

Your poster will contain the following

Basic

1. At the top of the poster in **LARGE BOLD** numbers, write the algebraic equation you chose to solve and illustrate.
2. T-chart with **at least** 5 x-values (and their corresponding y-values)
3. Grid paper (which will be glued to construction paper) in which you have graphed the equation using the 5 or more coordinates. Connect the points with a line, and label the line with the equation.

Advanced

4. Add color and other touches to make it a creative finished product
5. Choose 2 algebraic equations and follow the directions above. On your poster note and describe any intersections that occurred.

and/or

6. Choose a 4-Quadrant graph and include at least 3 negative values of x as well

and/or

7. Describe the slope (steepness of the line) as well as the y-intercept (where the line crosses the y-axis)

Template

*Write chosen equation(s)
here*

*Glue grid paper with
completed graph here*

*Put t-chart(s) and any other
advanced work here*

Grading Rubric

Criteria	4	3	2	1
Accuracy of Information	All information/work included is <u>completely</u> accurate; Work shows depth of higher understanding of standards	Nearly all information/work is accurate (only minor errors); All directions are followed	Most of the information/work is accurate; Most of the directions are followed	Very little/none of the information/work is accurate; Very little/none of the directions are followed
Neatness and Effort	All aspects of work are finalized <u>perfectly</u> ; included special touches that go beyond expectations	All aspects of work are finalized to expectations	Most of the work is finalized to expectations	Very little/none of the work is finalized to expectations

Standards Addressed

A.F. 1.0 Students write verbal expressions and sentences as algebraic expressions and equations; students evaluate algebraic expressions, solve simple linear equations, and graph and interpret their results.